WO 2005/095696 PCT/EP2005/003369

17

CLAIMS

- 1. Strengthening material suitable for use as reinforcement in composites, comprising at least one singular thickness-providing layer in the form of a knit of glass fibre which knit comprises at least one monofilament, and at least one singular strengthening layer connected to the singular thickness-providing layer.
- 2. Strengthening material as claimed in claim 1, wherein the monofilament is chosen from the group consisting of polyethylene, polyester, polypropylene, polyamide, synthetic materials and combinations thereof.
- 3. Strengthening material as claimed in claim 1 or 2, wherein the singular thickness-providing layer has a thickness of 0.5 up to and including 20 millimetres.
- 4. Strengthening material as claimed in any of the 20 claims 1-3, wherein the singular thickness-providing layer has a thickness of 1 up to and including 10 millimetres.
- 5. Strengthening material as claimed in any of the claims 1-4, wherein the singular thickness-providing layer 25 has a weight of 25 up to and including 1500 g/m^2 .
 - 6. Strengthening material as claimed in any of the claims 1-5, wherein the singular thickness-providing layer has a weight of 50 up to and including 1000 g/m^2 .
 - 7. Strengthening material as claimed in any of the claims 1-6, wherein the singular strengthening layer is chosen from the group consisting of glass fibre, aramid,

30

WO 2005/095696 PCT/EP2005/003369

18

carbon, basalt, ceramic, twintex, mixtures of glass and thermoplastics, flax, natural fibres, and combinations thereof.

- 8. Strengthening material as claimed in any of the claims 1-7, wherein the singular strengthening layer is a non-woven, a woven fabric or a membrane.
- 9. Strengthening material as claimed in any of the claims 1-8, wherein the singular thickness-providing layer has less weight per unit of volume than the singular strengthening layer.
- 10. Strengthening material as claimed in any of the claims 1-9, wherein the singular thickness-providing layer and the singular strengthening layer are mutually connected by knitting techniques, sewing techniques, needle punching techniques and/or combinations thereof.
- 20 11. Strengthening material as claimed in any of the claims 1-10, comprising at least two singular strengthening layers connected to one singular thickness-providing layer in the form of a knit of glass fibre and at least one monofilament, wherein the singular thickness-providing layer 25 is situated between the two singular strengthening layers.
 - 12. Strengthening laminate comprising a stack of two or more of the strengthening materials as claimed in any of the claims 1-11.

13. Composite comprising a strengthening material according to any of the claims 1-11 or a strengthening laminate according to claim 12.

30

WO 2005/095696 PCT/EP2005/003369

19

14. Method for the production of composites, comprising of forming a strengthening material according to any of the claims 1-11 or a strengthening laminate according to claim 12 into a desired shape, impregnating the strengthening material with a resin, and allowing the resin to cure.

15. Use of a knit of glass fibre comprising at least one polymeric monofilament for the production of composites.